

SPECIFICATIONS

Power Amplifier Section

Power Output

80 watts* per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion

Both Channels Driven into

8 ohms at 1,000 Hz	85 W + 85 W (Except U.S.A., Europe and U.K.)
4 ohms at 1,000 Hz	78 W + 78 W (Except U.S.A., Europe and U.K.)
Music Power Output (8 ohms)	145 W + 145 W (Except U.S.A., Europe and U.K.)

Total Harmonic Distortion

AUX → SPKR (8 Ω)/ Power in → SPKR (8 Ω)
(20 Hz to 20,000 Hz)

At Rated Output	0.09%
At 1/2 Rated Output	0.05%

(1,000 Hz)

At 1/2 Rated Output

Phono → SPKR (8 Ω)/ At -20 dB Volume Level

(1,000 Hz)

At Rated Output

Intermodulation Distortion (60 Hz : 7,000 Hz = 4 : 1)

At Rated Output

Damping Factor

Frequency Response

Overall (AUX → SPKR)

Phono "RIAA" Response

(Phono → REC out)

Power Bandwidth

0.2% T.H.D. 8 ohms

Input Sensitivity/Impedance

Phono MM

Tuner, AUX., Tape Play

Signal-to-Noise Ratio (IHF-A)

Phono MM

Phono MM

Tuner, AUX., Tape Play

Phono Maximum Input Level

MM

Output Level/Impedance

Tape REC (Pin)

Tone Control

60 Hz, 150 Hz, 400 Hz, 1,000 Hz, 2,400 Hz,
6,000 Hz, 15,000 Hz

Filter

Subsonic

Loudness Control

At -30 dB Volume Level

General

Power Supply Voltage, Frequency

Power Consumption

AC Outlet

Switched

Unswitched

Dimensions

H

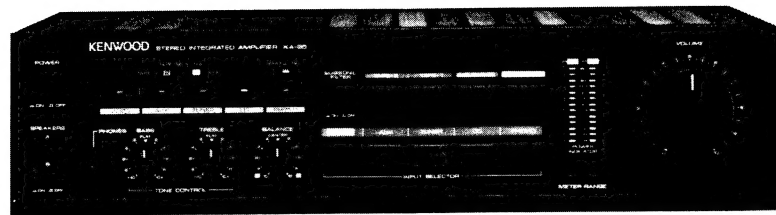
D

Weight

Net

Gross

*Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A



SPECIFICATION

(IHF'66)

Except European and U.K. Models

Power Amplifier Section

Rated Power Output

125 watts per channel minimum RMS, both channels driven at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.05% total harmonic distortion

Both Channels Driven into 8 ohms at 1 kHz 125 W + 125 W (Except USA, Europe and U.K.)

Total Harmonic Distortion (AUX - SPKR 8 Ω)

at Rated Output, 20 Hz ~ 20,000 Hz 0.05%
at 1/2 Rated Output, 20 Hz ~ 20,000 Hz 0.02%
at 1/2 Rated Output, 1 kHz 0.007%

(PHONO - SPKR 8 Ω : at -20 dB VOLUME Level)

at Rated Output, 1 kHz 0.02%

Intermodulation Distortion

(60 Hz:7 kHz = 4:1) 0.02% at rated power

into 8 ohms

Damping Factor 20 (1,000 Hz into 8 ohms)

Frequency Response 10 Hz to 100 kHz,

+0 dB, -3 dB

Input Sensitivity/Impedance

Phono MM 2.5 mV/47 k ohms

TUNER, AUX., TAPE PLAY 150 mV/33 k ohms

Signal-to-Noise Ratio (IHF-A)

Phono MM 73 dB for 2.5 mV input

Phono MM 79 dB for 5.0 mV input

TUNER, AUX., TAPE PLAY 100 dB

Maximum Input Level for Phono MM 140 mV (RMS), T.H.D. 0.05% at 1 kHz

Output Level/Impedance

TAPE REC (Pin) 150 mV/3.3 k ohms

Frequency Response for Phono RIAA standard curve ± 0.3 dB
(30 Hz to 20,000 Hz)

Tone Control

Bass ± 10 dB at 100 Hz

Treble ± 8 dB at 10 kHz

Loudness Control (at -30 dB VOLUME Level) +8 dB at 100 Hz

Subsonic Filter 18 Hz, 6 dB/oct.

General

Power Consumption 4.1 A (USA and Canada : UL and CSA)

230 W (Others)

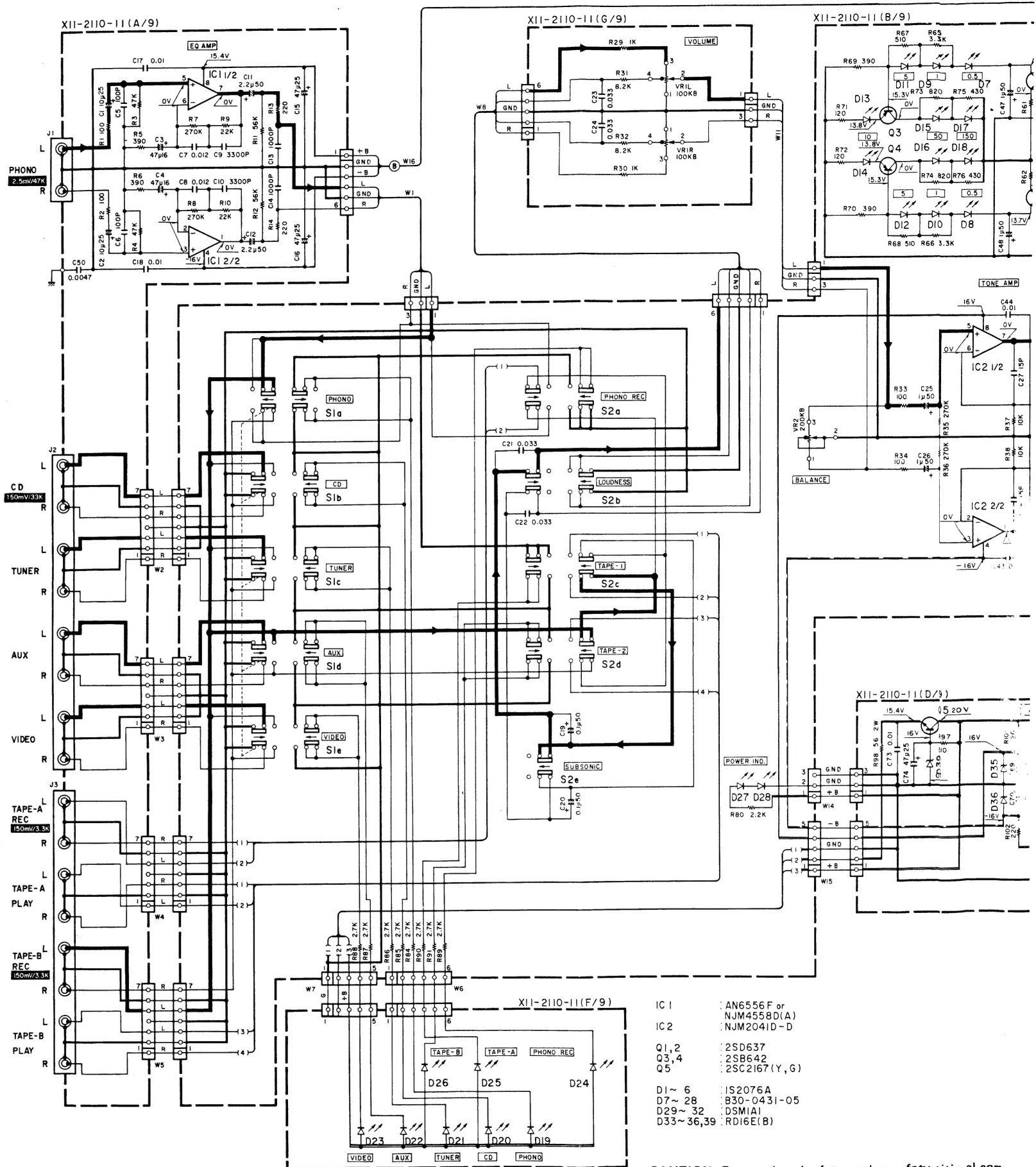
AC Outlets Switched 2, Unswitched 1
(Except some countries)

Dimensions W: 420 mm (16-9/16")

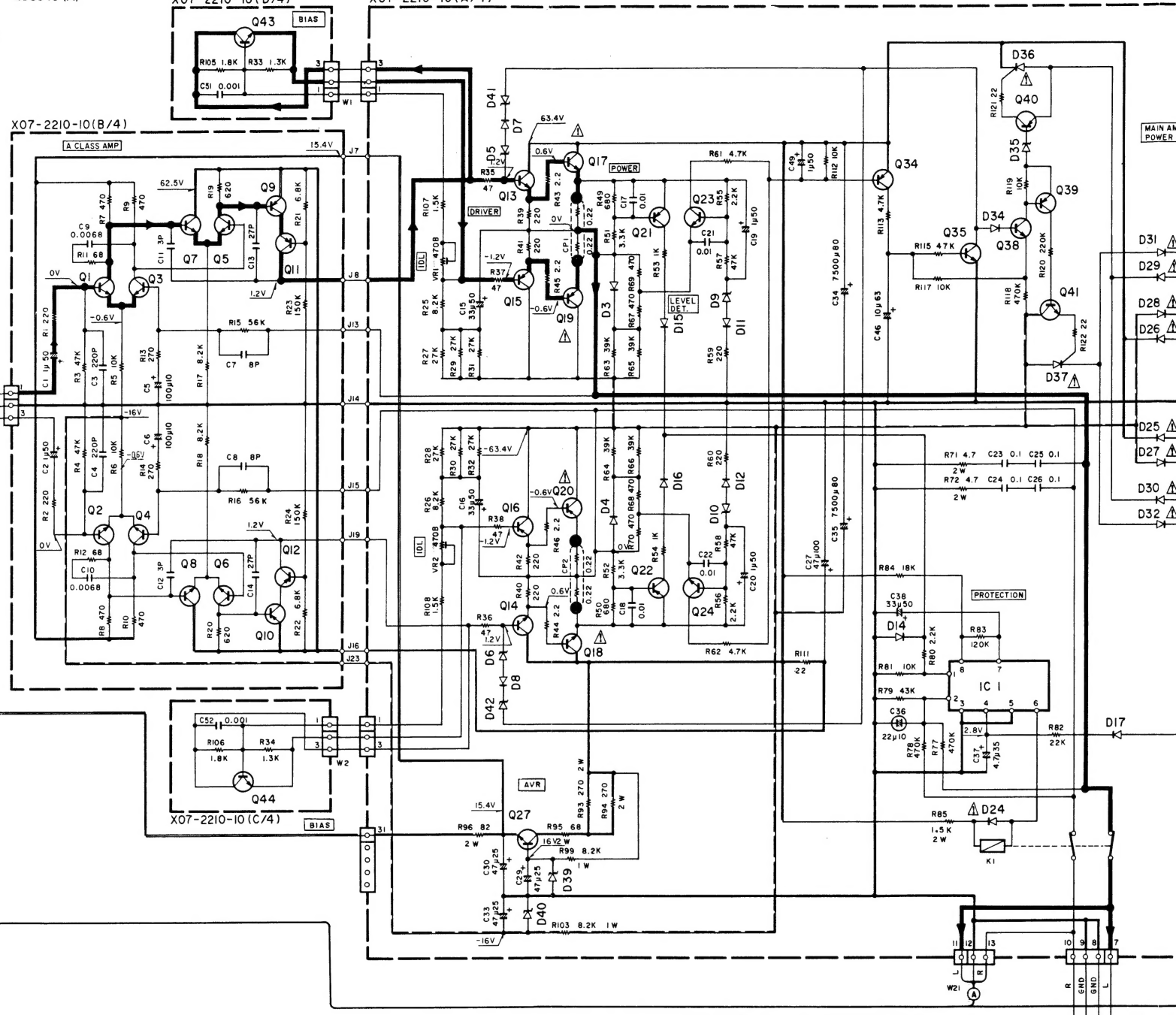
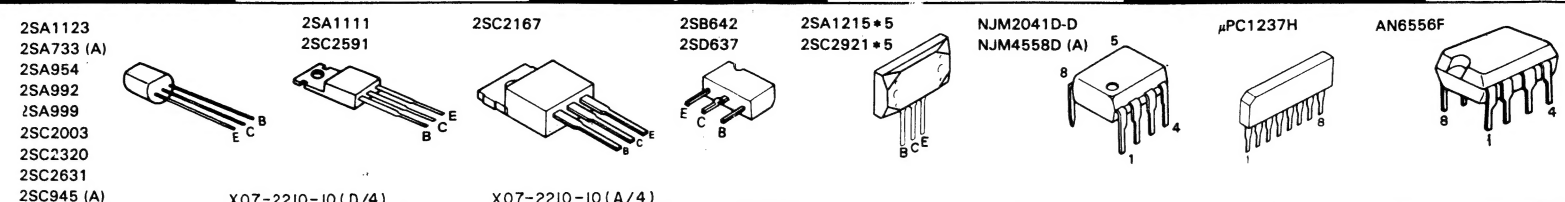
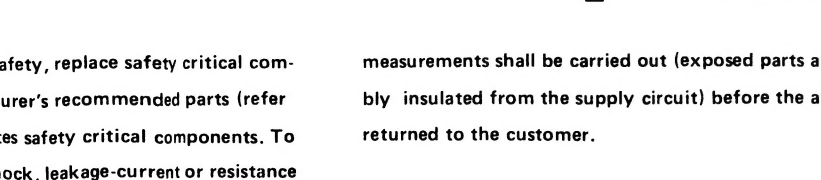
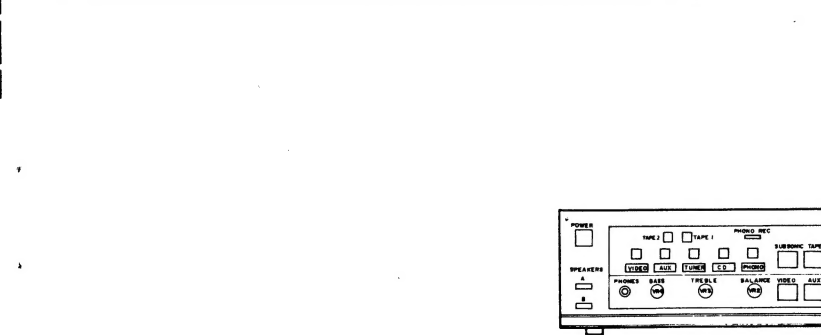
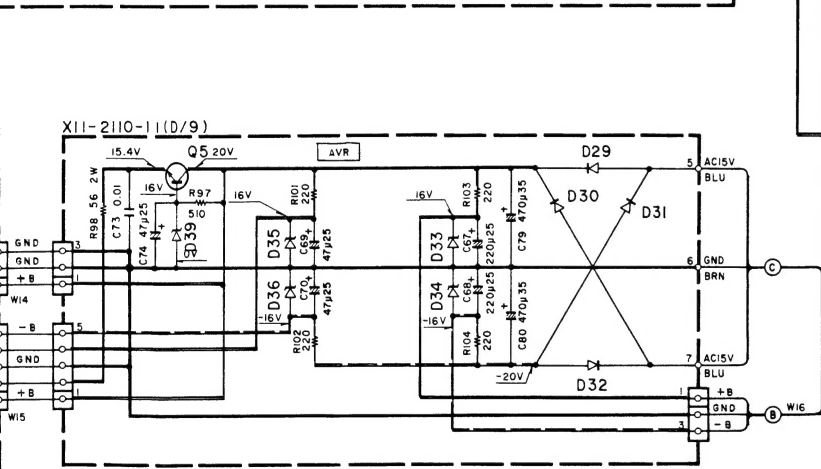
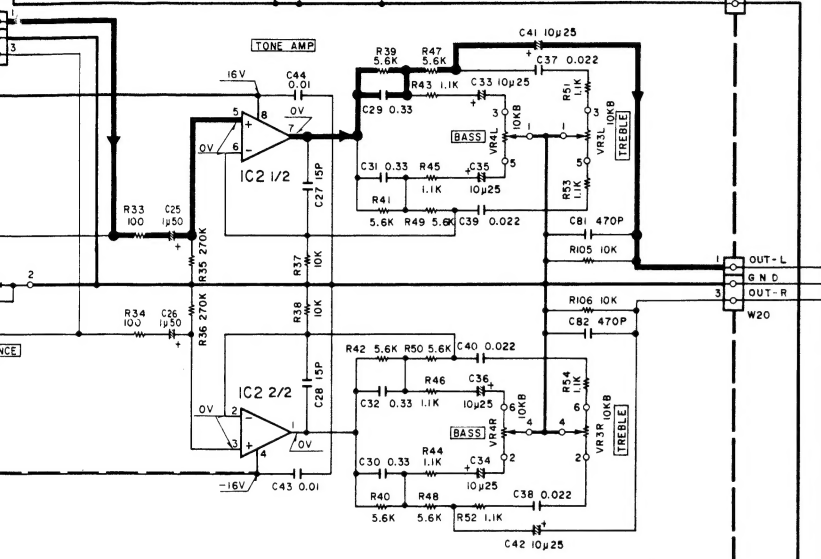
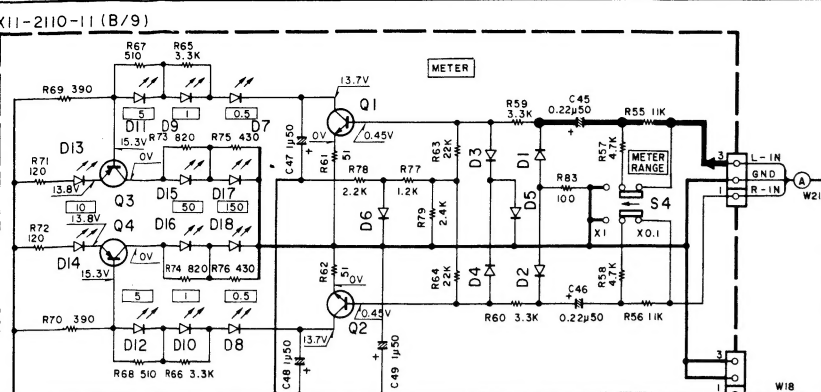
H: 109 mm (4-5/16")

D: 280 mm (11")

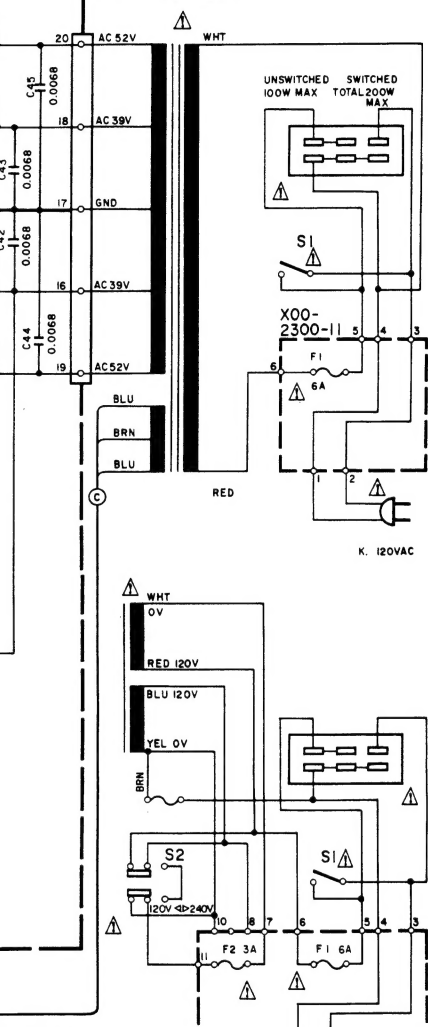
Weight (Net) 8.5 kg (18.7 lb)



CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance



- Q1~8,35,38,43,44
- Q9,10 2SC945(A)(Q,P) or 2SC2320(E,F)
- Q11,12 2SA733(A)(Q,R) or 2SA999(E,F)
- Q13,14 2SC2591(Q,R)
- Q15,16 2SA1111(Q,R)
- Q17,18 2SC2921 X 5
- Q19,20 2SA1215 X 5
- Q21,22,34,39 2SA992(F,E)
- Q23,24 2SC2631(Q,R)
- Q27 2SC2167(Y,G)
- Q40 2SA945(L,K)
- Q41 2SC2003(L,K)
- D3,4 IS2076 or IS1555 or IS133
- D5,6,41,42 RD18E(B)
- D7,8,11,12,14~16,34 IS2076A
- D9,10 RD8.2E(B)
- D17,24 DSMIAI
- D25~32 S3V20
- D35 RD24E(B)
- D36,37 TF620M
- D39,40 RD16E(B)
- IC 1 µPC1237H

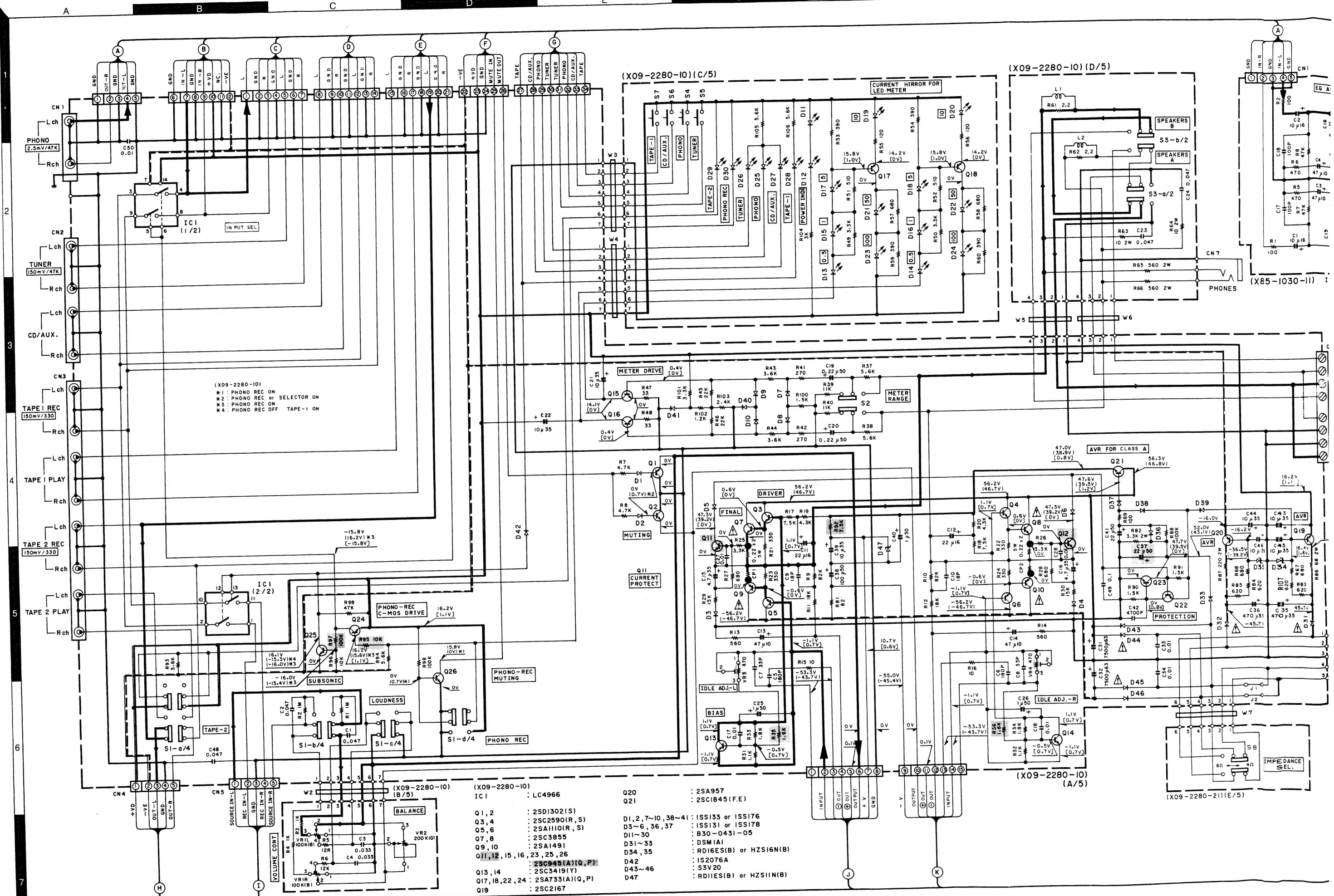


For safety, replace safety critical components with manufacturer's recommended parts (refer to the safety critical components. To ensure safety, check for leakage current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

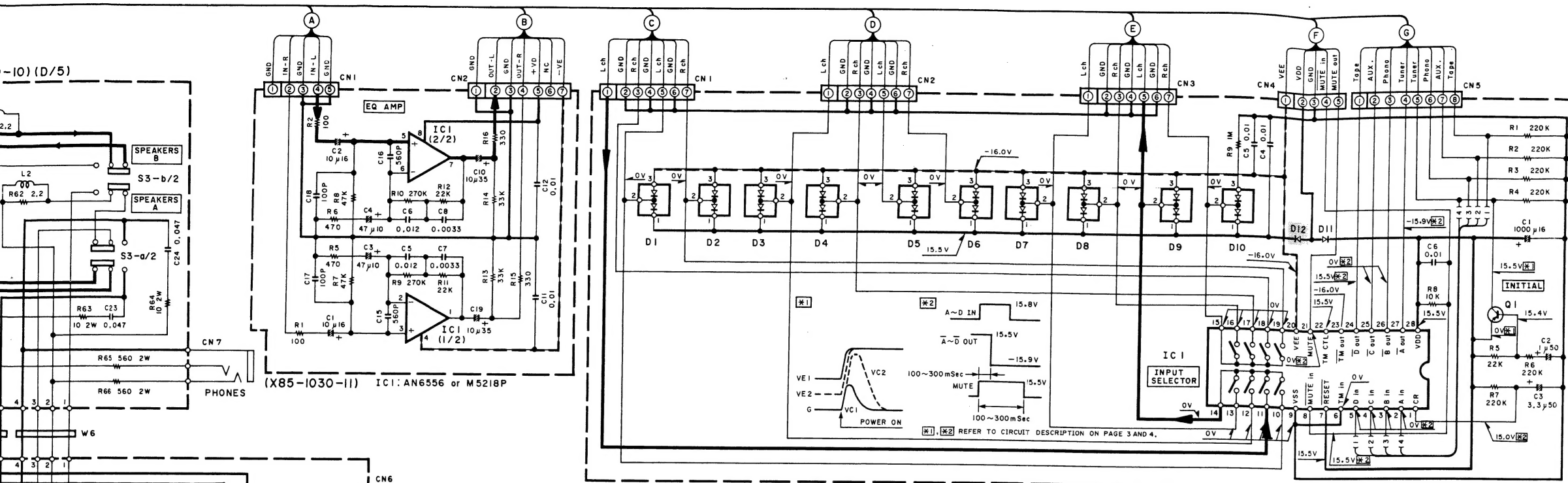
Les tensions c.c. doivent être mesurées avec un volt-mètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanden die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

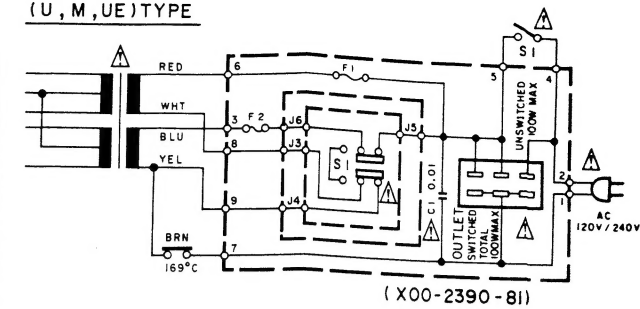


- (X09-2280-10) (C/5)
- IC1 : LC4966
- Q1,2 : 2SD1302(S)
- Q3,4 : 2SC2590(R, S)
- Q5,6 : 2SA1110(R, S)
- Q7,8 : 2SC3855
- Q9,10 : 2SA1491
- Q11,12,15,16,23,25,26 : 2SC945(A)(Q,P)
- Q13,14 : 2SC3419(Y)
- Q17,18,22,24 : 2SA733(A)(Q,P)
- Q19 : 2SC2167
- Q20 : 2SA957
- Q21 : 2SC1845(F,E)
- D1,2,7~10,38~41 : 1SS133 or 1SS176
- D3~6,36,37 : 1SS131 or 1SS178
- D11~30 : B30-0431-05
- D31~33 : DSM1A1
- D34,35 : RD16ES(B) or HZS16N(B)
- D42 : IS2076A
- D43~46 : S3V20
- D47 : RD11ES(B) or HZS11N(B)
- (X09-2280-10) (D/5)
- (X09-2280-10) (A/5)
- (X09-2280-21) (E/5)

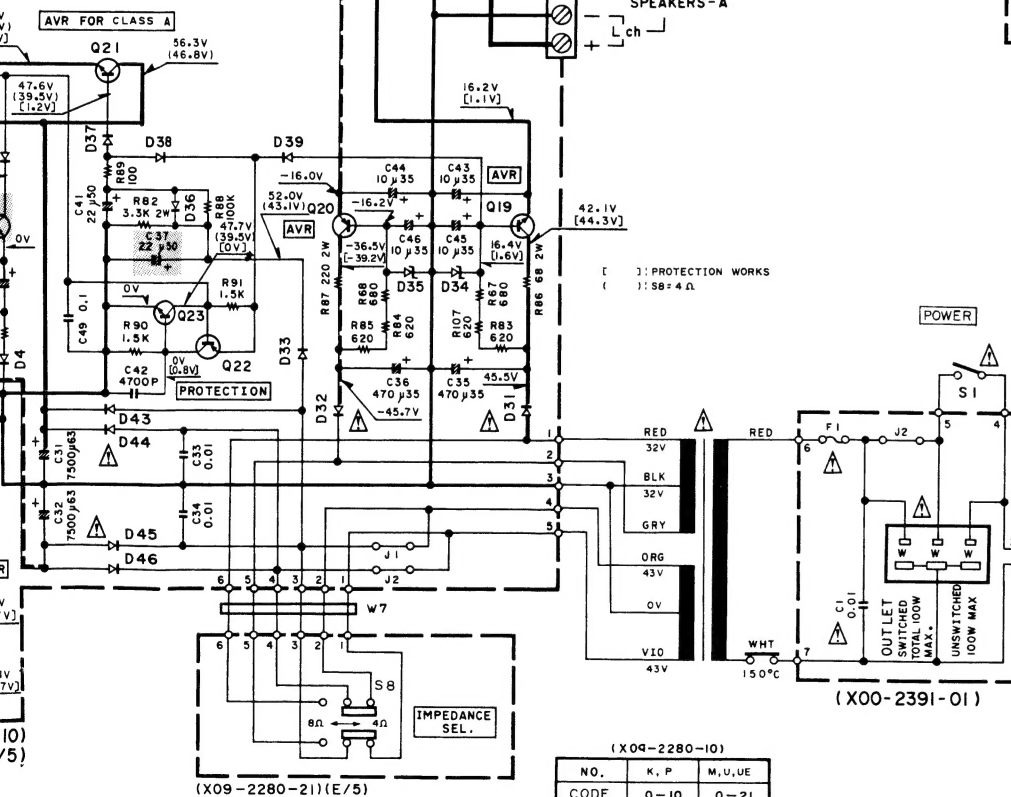
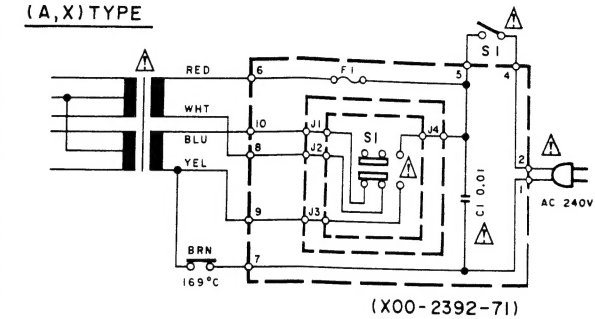
(10) (D/5)



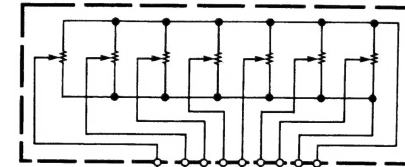
(U, M, UE) TYPE



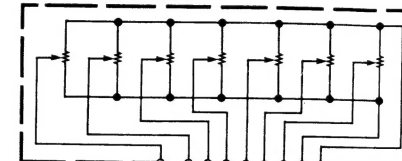
(A, X) TYPE



(R29-5006-05)



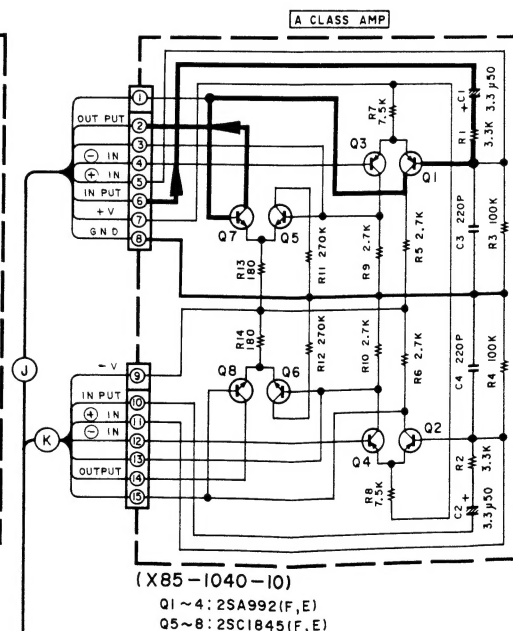
(R29-5006-05)



TONE UNIT (X11-2250-10)
IC1: 2: M5229P

Change
(X09-2280-10)
C37 = 22μ50 → 4.7μ63 (NP)
R35, 36 = 1.6K → 1.3K
R92 = 7.5K → 3.3K
R95 = 10K → 1K
R97 = 100K → 10K
Q11, 12 = 2SC945 (A, K, P) → 2SC1845 (F, E)

Change
(X13-5350-10)
D12 = 1SS133 → JAMPER



NO.	K, P	M, U, UE
CODE	0-10	0-21
J1, 2	YES	NO
W7	NO	YES
S8	NO	YES

